

## USPTO PATENT FULL-TEXT AND IMAGE DATABASE

<a href="#">Home</a>	<a href="#">Quick</a>	<a href="#">Advanced</a>	<a href="#">Pat Num</a>	<a href="#">Help</a>
<a href="#">Bottom</a>				
<a href="#">View Cart</a>		<a href="#">Add to Cart</a>		
<a href="#">Images</a>				

(1 of 1)

United States Patent  
Fujimoto, et al.

7,195,842  
March 27, 2007

Electrode for use in lithium battery and rechargeable lithium battery

### **Abstract**

In an electrode for a lithium battery having a lithium storing and releasing active thin film provided on a current collector, such as a microcrystalline or amorphous silicon thin film, the electrode is characterized in that the thin film is divided into columns by gaps formed therein in a manner to extend in its thickness direction and that the columnar portions are at their bottoms adhered to the current collector.

Inventors: Fujimoto; Masahisa (Osaka, JP), Fujitani; Shin (Hirakata, JP), Shima; Masaki (Uji, JP), Yagi; Hiromasa (Nishinomiya, JP), Tarni; Hisaki (Shijyonawate, JP), Kurokawa; Hiroshi (Katano, JP), Matsuta; Shigeki (Hirakata, JP), Domoto; Yoichi (Ikoma, JP), Kato; Yoshio (Hirakata, JP), Nakajima; Hiroshi (Hirakata, JP), Ikeda; Hiroaki (Hyogo, JP), Asaoka; Kenji (Sumoto, JP), Ohshita; Ryuji (Tokushima, JP)

Assignee: Sanyo Electric Co., Ltd. (Osaka, JP)

Appl. No.: 10/111,071

Filed: October 20, 2000

PCT Filed: October 20, 2000

PCT No.: PCT/JP00/07292

371(c)(1),(2),(4) Date: April 19, 2002

PCT Pub. No.: WO01/31720

PCT Pub. Date: May 03, 2001

### **Foreign Application Priority Data**

Oct 22, 1999 [JP]	11/301646
Dec 16, 1999 [JP]	11/357808
Dec 22, 1999 [JP]	11/365306
Dec 28, 1999 [JP]	11/374512
Feb 17, 2000 [JP]	2000/039454
Feb 24, 2000 [JP]	2000/047675
Mar 29, 2000 [JP]	2000/090583
Jul 07, 2000 [JP]	2000/207274